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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/693,846	10/20/2003	Harold L. Hughes	NC 84, 785

26384  
 NAVAL RESEARCH LABORATORY  
 ASSOCIATE COUNSEL (PATENTS)  
 CODE 1008.2  
 4555 OVERLOOK AVENUE, S.W.  
 WASHINGTON, DC 20375-5320

CONFIRMATION NO. 7086

## FORMALITIES LETTER



\*OC000000013508936\*

Date Mailed: 08/11/2004

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted*Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

~~Total~~ additional fee(s) required for this application is **\$130** for a Large Entity

- \$130 Late oath or declaration Surcharge.

Replies should be mailed to: Mail Stop Missing Parts  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria VA 22313-1450

08/20/2004 BSAYAS11 00000050 500281 10693486  
 01 FC:1051 130.00 DA

*A copy of this notice **MUST** be returned with the reply.*

*Roberta Lucas*

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



Fax Transmission from:  
U.S. Naval Research Laboratory  
Associate Counsel Intellectual Property, Code 1008.2  
4555 Overlook Ave., SW  
Washington, DC 20375-5325

To: U.S. Patent and Trademark Office, MAIL STOP MISSING PARTS  
Fax: (703) 746-4060  
Phone:

From: Amy L. Ressing  
Direct Phone: (202) 404-1558  
Main Office Phone: (202) 767-3427  
Fax: (202) 404-7380  
Date: August 19, 2004

Message: Serial No. 10/693846  
Confirmation No. 7086

Please find enclosed:

Fee Sheet (1 page)  
Transmittal Form (1 page)  
Response to Notice to File Missing Parts (1 page)  
Declaration (1 pages) *(one)*  
Copy of Notice to File Missing Parts (2 pages)

RECEIVED  
AUG 20 2004  
OIPE/JCWS

Cover Sheet + ~~6~~ 6 pages

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Name: Amy L. Ressing

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Registration No.: 45814

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PTO/SB/21 (02-04)

Approved for use through 07/31/2008. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)		Application Number	10/893,846
		Filing Date	October 20, 2003
		First Named Inventor	Hughes
		Art Unit	not yet assigned
		Examiner Name	not yet assigned
Total Number of Pages in This Submission	5	Attorney Docket Number	NC 84785

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input checked="" type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input checked="" type="checkbox"/> Response to Missing Parts/Incomplete Application	<b>Remarks</b> DECLARATION VIA FACSIMILE to: MAIL STOP MISSING PARTS - (703) 746-4060	
<input checked="" type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		
<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>		
Firm or Individual name	26384	
Signature	Amy L. Rissing CUSTOMER NUMBER	
Date	8/19/2004	

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Amy L. Rissing		
Signature	Amy L. Rissing	Date	8/19/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT APPLICATION  
N.C. 84,785

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: HUGHES Application No.: 10/693,846 Filed: October 20, 2003 For: SEMICONDUCTOR SUBSTRATE INCORPORATING A NEUTRON CONVERSION LAYER	Examiner: To be assigned Group Art Unit: To be assigned Confirmation No: 7086  August 19, 2004
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**RESPONSE TO NOTICE TO FILE MISSING PARTS OF APPLICATION**

Mail Stop MISSING PARTS  
Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This communication is responsive to the Notice to File Missing Parts of Application, mailed 11 August 2004. The Notice indicates that the oath or declaration is missing.

In response, Applicants submit a properly signed Filing Declaration and Power of Attorney that meets the requirements of 37 CFR 1.63.

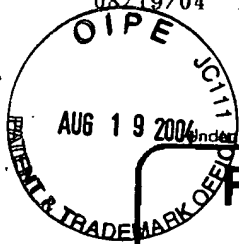
Please charge the surcharge of \$130.00 set forth in 37 CFR 1.16(e) to Deposit Account 50-0281. Kindly charge any additional fees due, or credit overpayment of fees, to Deposit Account No. 50-0281.

Prepared by:  
Amy Loch Ressing  
Reg. No. 45,814

Respectfully submitted,

A handwritten signature in cursive script that reads "Amy L. Ressing".

Amy L. Ressing



Approved for use through 04/30/2003. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
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<b>FEE TRANSMITTAL</b> <b>for FY 2004</b> Effective 0110112003. Patent fees are subject to annual revision.		<b>Complete If Known</b>	
		Application Number	10/693,846
		Filing Date	October 20, 2003
		First Named Inventor	HUGHES
		Examiner Name	Not Yet Assigned
		Art Unit	Not Yet Assigned
		Attorney Docket No.	84,785

☐ Applicant claims small entity status. See 37 CFR 1.27

<b>TOTAL AMOUNT OF PAYMENT</b>	<b>(\$)</b> 130
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<b>METHOD OF PAYMENT</b> (check all that apply) <input type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None <input checked="" type="checkbox"/> Deposit Account: Deposit Account Number: 50-0281 Deposit Account Name: NAVAL RESEARCH LABORATORY The Commissioner is authorized to: (check all that apply) <input checked="" type="checkbox"/> Charge fee(s) indicated below <input checked="" type="checkbox"/> Credit any overpayments <input type="checkbox"/> Charge any additional fee(s) during the pendency of this application <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.		<b>FEE CALCULATION (continued)</b> <b>3. ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>1051 130</td> <td>2051 65</td> <td>Surcharge - late filing fee or oath</td> <td>130</td> </tr> <tr> <td>1052 50</td> <td>2052 25</td> <td>Surcharge - late provisional filing fee or cover sheet</td> <td></td> </tr> <tr> <td>1053 130</td> <td>1053 130</td> <td>Non-English specification</td> <td></td> </tr> <tr> <td>1812 2,520</td> <td>1812 2,520</td> <td>For filing a request for ex parte reexamination</td> <td></td> </tr> <tr> <td>1804 920*</td> <td>1804 920*</td> <td>Requesting publication of SIR prior to Examiner action</td> <td></td> </tr> <tr> <td>1805 1,840*</td> <td>1805 1,840*</td> <td>Requesting publication of SIR after Examiner action</td> <td></td> </tr> <tr> <td>1251 110</td> <td>2251 55</td> <td>Extension for reply within first month</td> <td></td> </tr> <tr> <td>1252 420</td> <td>2252 205</td> <td>Extension for reply within second month</td> <td></td> </tr> <tr> <td>1253 950</td> <td>2253 465</td> <td>Extension for reply within third month</td> <td></td> </tr> <tr> <td>1254 1480</td> <td>2254 725</td> <td>Extension for reply within fourth month</td> <td></td> </tr> <tr> <td>1255 2010</td> <td>2255 985</td> <td>Extension for reply within fifth month</td> <td></td> </tr> <tr> <td>1401 330</td> <td>2401 160</td> <td>Notice of Appeal</td> <td></td> </tr> <tr> <td>1402 330</td> <td>2402 160</td> <td>Filing a brief in support of an appeal</td> <td></td> </tr> <tr> <td>1403 290</td> <td>2403 140</td> <td>Request for oral hearing</td> <td></td> </tr> <tr> <td>1451 1,510</td> <td>1451 1,510</td> <td>Petition to institute a public use proceeding</td> <td></td> </tr> <tr> <td>1452 110</td> <td>2452 55</td> <td>Petition to revive - unavoidable</td> <td></td> </tr> <tr> <td>1453 1,330</td> <td>2453 650</td> <td>Petition to revive - unintentional</td> <td></td> </tr> <tr> <td>1501 1,330</td> <td>2501 650</td> <td>Utility issue fee (or reissue)</td> <td></td> </tr> <tr> <td>1502 480</td> <td>2502 235</td> <td>Design issue fee</td> <td></td> </tr> <tr> <td>1503 640</td> <td>2503 315</td> <td>Plant issue fee</td> <td></td> </tr> <tr> <td>1460 130</td> <td>1460 130</td> <td>Petitions to the Commissioner</td> <td></td> </tr> <tr> <td>1807 50</td> <td>1807 50</td> <td>Processing fee under 37 CFR 1.17(q)</td> <td></td> </tr> <tr> <td>1808 180</td> <td>1808 180</td> <td>Submission of information Disclosure Stmt</td> <td></td> </tr> <tr> <td>8021 40</td> <td>8021 40</td> <td>Recording each patent assignment per property (times number of properties)</td> <td></td> </tr> <tr> <td>1809 770</td> <td>2809 375</td> <td>Filing a submission after final rejection (37 CFR 1.129(a))</td> <td></td> </tr> <tr> <td>1810 770</td> <td>2810 375</td> <td>For each additional invention to be examined (37 CFR 1.129(b))</td> <td></td> </tr> <tr> <td>1801 770</td> <td>2801 375</td> <td>Request for Continued Examination (RCE)</td> <td></td> </tr> <tr> <td>1802 900</td> <td>1802 900</td> <td>Request for expedited examination of a design application</td> <td></td> </tr> </tbody> </table>		Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	1051 130	2051 65	Surcharge - late filing fee or oath	130	1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet		1053 130	1053 130	Non-English specification		1812 2,520	1812 2,520	For filing a request for ex parte reexamination		1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action		1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action		1251 110	2251 55	Extension for reply within first month		1252 420	2252 205	Extension for reply within second month		1253 950	2253 465	Extension for reply within third month		1254 1480	2254 725	Extension for reply within fourth month		1255 2010	2255 985	Extension for reply within fifth month		1401 330	2401 160	Notice of Appeal		1402 330	2402 160	Filing a brief in support of an appeal		1403 290	2403 140	Request for oral hearing		1451 1,510	1451 1,510	Petition to institute a public use proceeding		1452 110	2452 55	Petition to revive - unavoidable		1453 1,330	2453 650	Petition to revive - unintentional		1501 1,330	2501 650	Utility issue fee (or reissue)		1502 480	2502 235	Design issue fee		1503 640	2503 315	Plant issue fee		1460 130	1460 130	Petitions to the Commissioner		1807 50	1807 50	Processing fee under 37 CFR 1.17(q)		1808 180	1808 180	Submission of information Disclosure Stmt		8021 40	8021 40	Recording each patent assignment per property (times number of properties)		1809 770	2809 375	Filing a submission after final rejection (37 CFR 1.129(a))		1810 770	2810 375	For each additional invention to be examined (37 CFR 1.129(b))		1801 770	2801 375	Request for Continued Examination (RCE)		1802 900	1802 900	Request for expedited examination of a design application	
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<b>1. BASIC FILING FEE</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>1001 770</td> <td>2001 375</td> <td>Utility filing fee</td> <td></td> </tr> <tr> <td>1002 340</td> <td>2002 165</td> <td>Design filing fee</td> <td></td> </tr> <tr> <td>1003 530</td> <td>2003 260</td> <td>Plant filing fee</td> <td></td> </tr> <tr> <td>1004 770</td> <td>2004 375</td> <td>Reissue filing fee</td> <td></td> </tr> <tr> <td>1005 160</td> <td>2005 80</td> <td>Provisional filing fee</td> <td></td> </tr> </tbody> </table>				Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	1001 770	2001 375	Utility filing fee		1002 340	2002 165	Design filing fee		1003 530	2003 260	Plant filing fee		1004 770	2004 375	Reissue filing fee		1005 160	2005 80	Provisional filing fee	
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<b>2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>1202 18</td> <td>2202 9</td> <td>Claims in excess of 20</td> <td></td> </tr> <tr> <td>1201 86</td> <td>2201 42</td> <td>Independent claims in excess of 3</td> <td></td> </tr> <tr> <td>1203 290</td> <td>2203 140</td> <td>Multiple dependent claim, if not paid</td> <td></td> </tr> <tr> <td>1204 86</td> <td>2204 42</td> <td>Reissue independent claims over original patent</td> <td></td> </tr> <tr> <td>1205 18</td> <td>2205 9</td> <td>Reissue claims in excess of 20 and over original patent</td> <td></td> </tr> </tbody> </table>				Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	1202 18	2202 9	Claims in excess of 20		1201 86	2201 42	Independent claims in excess of 3		1203 290	2203 140	Multiple dependent claim, if not paid		1204 86	2204 42	Reissue independent claims over original patent		1205 18	2205 9	Reissue claims in excess of 20 and over original patent	
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<b>SUBTOTAL (1)</b> (\$ 0)																											
<b>SUBTOTAL (2)</b> (\$ 0)																											

\* or number previously paid, if greater; For Reissues, see above

<b>Other fee (specify)</b>		<b>SUBTOTAL (3)</b> (\$ 130)
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<b>SUBMITTED BY</b> Name (Print/Type): Amy Rensing Signature: <i>Amy Rensing</i>		Registration No. (Attorney/Agent): 45,814 Date: 8/19/04	
Telephone (202) 404-1558		(Complete if applicable)	

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